

**Tetra Tech EM Inc.**

200 E. Randolph Drive, Suite 4700 ♦ Chicago, IL 60601 ♦ (312) 856-8700 ♦ FAX (312) 938-0118

December 31, 1997

EPA Region 5 Records Ctr.



248066

Mr. Michael Bellot  
Remedial Project Manager  
Remedial Response Unit No. 1  
U.S. Environmental Protection Agency Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604

**Subject: Field Oversight Summary No. 3  
Final Remedial Design Activities  
Blackwell Forest Preserve Landfill, DuPage County, Illinois  
Contract No. 68-W8-0084, Work Assignment No. 84-5P6Y**

Dear Mr. Bellot:

On Thursday, November 6, and Wednesday, November 12, 1997, Tetra Tech EM Inc. (Tetra Tech) conducted oversight of final remedial design activities at the Blackwell Forest Preserve Landfill in DuPage County, Illinois. The landfill is owned by the DuPage County Forest Preserve District (FPD). The activities that Tetra Tech oversaw consisted of soil and groundwater sampling. Montgomery Watson, which is a consultant to the FPD, conducted the sampling activities.

Judy Wagner represented Tetra Tech on site during the oversight period. A summary of Tetra Tech's oversight activities is enclosed. Appendix A of the enclosure contains photographs of site activities, and Appendix B contains Tetra Tech's field notes.

If you have any questions, please call Kevin Schnoes at (312) 856-8735 or Manoj Mishra at (312) 856-8721.

Sincerely,

*for* Kostas Dovantzis, Ph.D., P.E., D.E.E.  
Site Manager

Enclosure

cc: Thomas Short, EPA Project Officer (letter only)  
Marguerite Hendrixson, EPA Contracting Officer (letter only)  
Majid Chaudhry, Tetra Tech Program Manager (letter only)  
Manoj Mishra, Tetra Tech  
Kevin Schnoes, Tetra Tech

**ENCLOSURE**

**FIELD OVERSIGHT SUMMARY NO. 3  
FINAL REMEDIAL DESIGN ACTIVITIES  
BLACKWELL FOREST PRESERVE LANDFILL  
DUPAGE COUNTY, ILLINOIS**

**(Three Pages)**

**FIELD OVERSIGHT SUMMARY NO. 3  
FINAL REMEDIAL DESIGN ACTIVITIES  
BLACKWELL FOREST PRESERVE LANDFILL  
DUPAGE COUNTY, ILLINOIS**

**Tetra Tech Oversight Personnel:**  
**Reporting Period:**

**Judy Wagner**  
**November 6 and 12, 1997**

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**INTRODUCTION**

The DuPage County Forest Preserve District (FPD) is conducting final remedial design activities at the Blackwell Forest Preserve Landfill site in DuPage County, Illinois, pursuant to a consent order signed by the FPD and the U.S. Environmental Protection Agency (EPA) on September 25, 1989. After the site's final listing on the National Priorities List, a remedial investigation/feasibility study was performed. On March 7, 1996, an administrative order by consent was signed by the FPD and EPA to address installation of extraction wells, a predesign investigation, design of a leachate collection system (LCS), and cap repair. Leachate extraction wells were installed at the site in June 1996, and the predesign investigation began in October 1996. In February 1997, Montgomery Watson, which is a consultant to the FPD, submitted a work plan for final remedial design activities at the site. The activities discussed in the work plan include recapping of certain areas of the landfill and installation of an LCS. EPA subsequently approved the work plan. Envirocon, which is a subcontractor to Montgomery Watson, and Envirocon's subcontractor, RTE Environmental, conducted the LCS installation activities in September and November 1997.

At EPA's request, Tetra Tech EM Inc. (Tetra Tech) conducted oversight of soil and groundwater sampling activities at the site on November 6 and 12, 1997. These activities were performed by Montgomery Watson. This report summarizes Tetra Tech's oversight observations and addresses future activities. Appendix A contains photographs of the soil and groundwater sampling activities, and Appendix B contains Tetra Tech's field notes.

## **OVERSIGHT OBSERVATIONS**

**Thursday, November 6, 1997**

At 8:15 a.m., Judy Wagner of Tetra Tech arrived at the site and met with Jerry Pionessa of Envirocon to review site activities and view drip leg DL-01. Envirocon was removing liquid from the Baker tank by DL-01 for testing or disposal purposes. The liquid (groundwater) in the tank was encountered during installation of DL-01.

At 9:10 a.m., Tetra Tech met with two groundwater sampling personnel, Brian Griesemer and Judy Kinch, of Montgomery Watson. Tetra Tech observed development of newly installed monitoring well G-145. The well was developed using a bailer and pump. Purge water was monitored for pH, conductivity, temperature, dissolved oxygen, color, and turbidity. At least 10 well volumes were removed from G-145. Well development was considered complete when repeated purge water readings for individual parameters, except turbidity, were within 10 percent of each other.

Tetra Tech also observed groundwater sampling activities at several monitoring wells, including G-145, G-133S, G-133D, and G-135. Groundwater sampling was performed using a pump and a low-flow sampling technique.

Tetra Tech also spoke with Walter Buettner of Montgomery Watson and requested borelogs and diagrams for the newly installed monitoring wells on the west and south sides of the landfill. Mr. Buettner told Tetra Tech that when the borelogs and diagrams are available they will be sent to EPA.

At the end of the day, Tetra Tech concluded that all observed groundwater sampling had been performed in accordance with the EPA-approved sampling plan. Tetra Tech left the site at 5:00 p.m.

**Wednesday, November 12, 1997**

At 10:00 a.m., Judy Wagner of Tetra Tech arrived at the site and met with Jerry Pionessa of Envirocon and John McDunna of Montgomery Watson. Tetra Tech was informed that groundwater sampling activities had occurred on Tuesday, November 11, 1997.

At 10:35 a.m., Tetra Tech observed Brian Griesemer of Montgomery Watson collecting waste samples from a debris pile. This pile contained material excavated during installation of drip leg DL-01 and lift station LS-01 (see Photographs No. 1, 2 and 3). The samples collected from the debris pile were to be analyzed for all Toxic Characteristic Leaching Procedure parameters. Jerry Pionessa informed Tetra Tech that the debris pile was to be transferred to two lined, covered roll-off boxes later in the day.

Tetra Tech took photographs of newly installed groundwater monitoring wells south of the landfill (see Photographs No. 4, 5, 6, 7, and 8). At 11:20 a.m., Tetra Tech returned to LS-01 to take additional photographs (see Photographs No. 9 and 10).

At about 11:30 a.m., Tetra Tech discussed previous groundwater sampling activities at the site with Brian Griesemer of Montgomery Watson. Mr. Griesemer informed Tetra Tech that monitoring well G-141D had been purged and sampled with a bailer because of equipment problems; Mr. Griesemer added that this method had been approved by EPA during an earlier telephone conversation. At 11:45 a.m., Tetra Tech and Jerry Pionessa of Envirocon drove to the top of Mount Hoy (the landfill) to view the concrete slab and gas vent flame undergoing installation at the top of the landfill (see Photograph 11). Tetra Tech left the site at 12:30 p.m.

### **FUTURE ACTIVITIES**

As directed by EPA, Tetra Tech will continue its oversight activities at the site and provide EPA with field oversight summary reports. In December, 1997, Tetra Tech will observe the LCS operation startup. In January, 1988, Tetra Tech anticipates conducting field oversight of soil sampling at the north stormwater pipe. In the spring of 1998, Tetra Tech anticipates overseeing cap repairs in Area 4 of the landfill which were postponed because the FPD did not have sufficient clay to finish cap repairs.

**APPENDIX A**

**PHOTOGRAPHIC LOG**

**(Six Pages)**



Photograph No. 1

Orientation: West

Description: View of lift station LS-01, a component of the leachate collection system (LCS)

Location: South side of the landfill

Date: 11/12/97



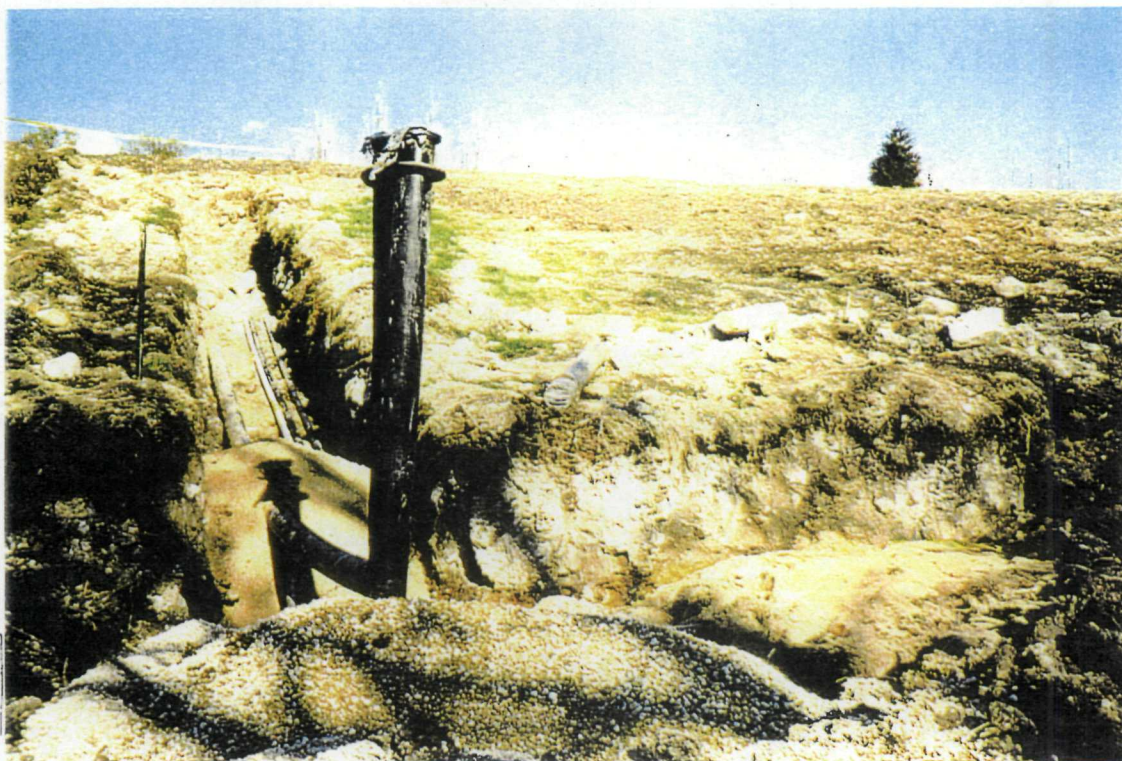
Photograph No. 2

Orientation: North

Description: Pile of debris excavated during installation of drip leg DL-01

Location: South side of the landfill

Date: 11/12/97



Photograph No. 3  
 Orientation: North  
 Description: View of the DL-01 component of the LCS

Location: South side of the landfill  
 Date: 11/12/97



Photograph No. 4  
 Orientation: West  
 Description: View of newly installed monitoring well G-145

Location: South side of the landfill  
 Date: 11/12/97



Photograph No. 5

Orientation: East

Location: South side of the landfill

Date: 11/12/97

Description: View of newly installed monitoring well G-145 with Mount Hoy (the landfill) in the background



Photograph No. 6

Orientation: Northwest

Location: South side of the landfill

Date: 11/12/97

Description: View of newly installed monitoring well G-142 (brown) with monitoring well G-138 (yellow) in the background



Photograph No. 7

Orientation: North

Location: South side of the landfill

Date: 11/12/97

Description: View of newly installed monitoring wells G-143 (left) and G-146 (right)



Photograph No. 8

Orientation: South

Description: View of monitoring well G-139 (yellow) and newly installed monitoring well G-144 (brown)

Location: South side of the landfill

Date: 11/12/97



Photograph No. 9

Orientation: Downward

Description: View inside the green, fiberglass, protective vault for LS-01

Location: South side of the landfill

Date: 11/12/97



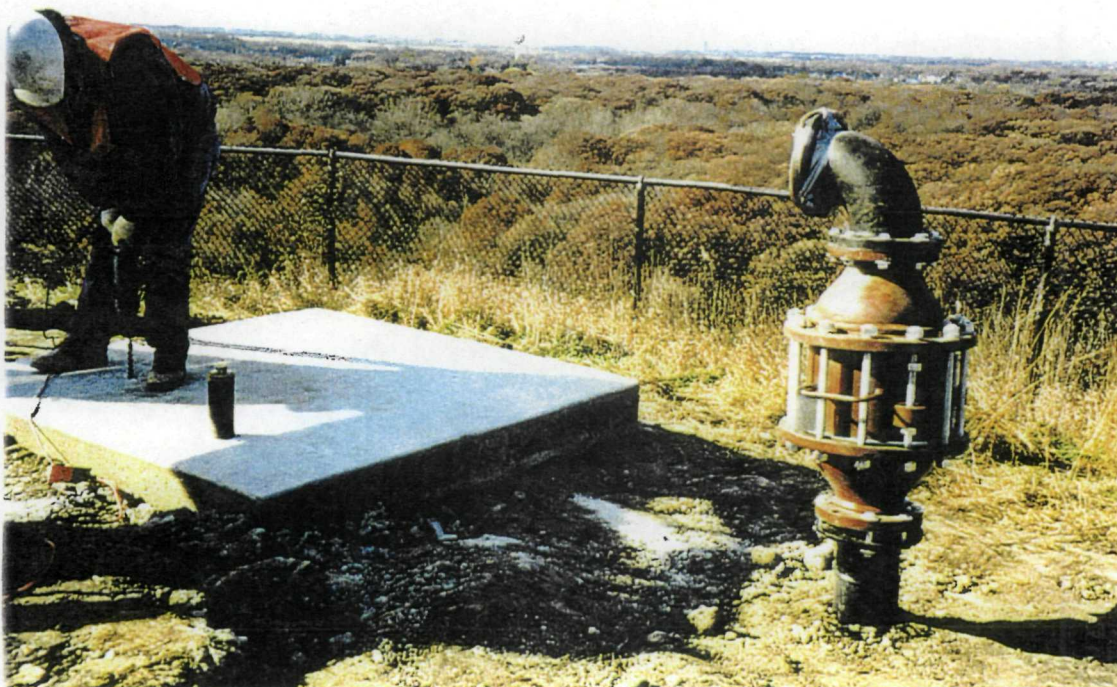
Photograph No. 10

Orientation: West

Description: Green, fiberglass, protective vault built to enclose LS-01

Location: South side of the landfill

Date: 11/12/97



Photograph No. 11

Orientation: West

Description: Gas vent and concrete slab undergoing installation at the top of the landfill

Location: Top of Mount Hoy

Date: 11/12/97

**APPENDIX B**  
**FIELD NOTES**  
(Six Sheets)

PRC Environmental Management, Inc.

Logbook No. \_\_\_\_\_

(For Single Project Use Only)

Project No.: 030-008403

Project Location: Blackwell F.P.

Site ID/GPS: \_\_\_\_\_

Issuance No.	Date	Name	Last Page Used

Blackwell

Field Logbook No. \_\_\_\_\_

Date Nov 6, 97

8:15 TetraTech on-site  
Judy Wagner

40° overcast, drizzling

met with Jerry,  
drove around site to top  
of hill for overview, then  
to drip leg. lg baker  
tank being pumped

9:10 met up with  
Brian + Judy of M-W  
at MW 6-145 (new)  
who are developing 6-145

Brian Griesemer  
Judy Kinch

Talked to Walter Boettner  
regarding logs + diagrams for  
new wells. They will not be  
available until the middle  
of next week + will be sent  
to EPA via tech letter.

Field Logbook No. Blackwell Date \_\_\_\_\_

G-145 developed by hand  
bailing for 30 minutes. Pump  
+ tubing dropped in well then  
lifted 2 feet off bottom to  
continue developing.

Field analyses done using  
HydroLab Scout 2 Water  
Quality Data System with  
Data Sonde (ST) 3 cell to do  
which holds probes.

Measurements taken:

Time

gallons

pH

specific conductivity

T. celcius

D.O.

Color

turbidity - not used for 10%  
criteria

water level

Purge 10 well volumes - minimum  
Then must get 3 readings  
within 10% of each other

Field Logbook No. \_\_\_\_\_ Date 11/6/97

to complete development.

G-145 - 100 gal = 10 well vol  
Tubing left in well (dedicated)  
sample

10:55 Development complete  
+ begin clean at  
parking lot on west side  
by former swim area.

11:30 At G-133S + G-133D  
to sample. 1st taking water  
level readings

Sampling at G-133D, pump  
is 5' from bottom of well

12:20 sample collected

BLW-GWG133D-01

~~BLW-GWG~~

Pump, W.L. meter, + other  
equip cleaned. Purging  
at G-133S

13:15 - Begin sampling G-133S  
BLW-GWG133S-01

Field Logbook No. Blackwell Date \_\_\_\_\_

1400 <sup>in</sup> 2:00-2:40 that's <sup>(MW)</sup>  
 1440 Montgomery-Watson  
 TE EMI off-site  
 for lunch

1500  
<sup>in</sup> 3:00 A + mwg-135 setting  
 up to sample

Low flow sampling is drawing  
 down water column ~~fast~~  
 indicating that the well is not  
 recharging. Purged water would  
 be from stagnant -sampled  
 upper water column. M-W  
 decided to purge well dry,  
 let it recharge, + then will  
 collect samples.

G-135 is about 83 feet deep  
 + in bedrock. Approx. 40 gal  
 (1 well volume) removed.  
 Allowed to recharge for 10  
 minutes. Reconnected

1612 Reconnected tubing to HydroLab.  
 (4:10 PM)

Field Logbook No. \_\_\_\_\_ Date 11/6/97

7 readings of field parameters  
 taken.

- Air bubbles seen in water line.  
 Field parameters for sampling:

Temp

DO

Turbidity

pH

Redox

Conductivity

1630 Begin sample collection  
 BW-GWG 135-01

Samples were collected per  
 sampling plan.

~~1700~~ 1700 TE EMI off-site

~~K. W. Jones~~

Field Logbook No. Blackwell Date 11/12/97

1000 Tetra Tech On-site  
 Judy Wagner

met Jerry Pines &  
 John McQuinn - MW  
 They told me that GW sampling  
 was done yesterday.

met w/ Brian at drip log  
 + lift station on south  
 side. Brian is preparing  
 to take samples of debris  
 encountered during trenching.

Observed lift station which  
 has been installed + has  
 been back-filled.

~~Photo #1~~ facing west  
 lift station - south

Photo #2 facing north  
 pile of debris excavated  
 from locations of drip log  
 + lift station

Field Logbook No. Blackwell Date 11/12/97

10:35 MW water collecting  
 composite sample of soil  
 from debris pile. Sample  
 will undergo TCLP analysis  
 VOC, SVOC, metals, pest cicly

Photo 3 North - NE

Drip log

herbicides  
 no paint  
 filter

Two Brown

Sample #

BW-CDLSOI-01

Blackwell - Construction Debris  
 Lift Station 1-

Photo 4 West (deep well)

G-145 well installed  
 end of Sept + early October

Photo 5 East

G-145 with mt. Holy  
 in background

Photo 6 (brown) - shallow

G-142 w/ G-130 in  
 background (yellow)

Photo 7

Photo 71 North  
G-143 + G1146  
shallow deep

Photo 8

South

G-144 + G-139

Gr-144 shallow new well  
to west of Gr-139-deep  
well. Bricun (m-w) off-site  
to deliver samples to lab.

Thursday - pre start up to determine if lift stations are working

Dec 3 - official started planned  
where ENA, IEPA will observe

1120 Returned to LSC1  
to photograph unit

~~6141 D-15~~

Photo 9

Photo 9 Downward  
lift station inside green,  
fiberglass protective vault.

Photo 10

west

Vault in place around  
lift station

Additional activities scheduled for today include backfilling trenches leading to drip log & lift station with clay.

Discussed groundwater sampling with Brian of M-W earlier & he stated that G-141D ~~was~~<sup>had to be</sup> hand bailed because of equipment problems & that this method was OK'd by EPA via telephone conversations. Apparently this contingency method is outlined in M-W's work plans.

1130 - Tetra Tech to find Jerry P.

**Date**

11/12/97

Photo 11 West  
Gas vent & concrete slab

Per Environment (Jerry) pile of construction debris will be transferred to 2 roll off boxes (lined & covered) today.

1205 Call to Manoj Mishra,  
TEENI to give update of  
morning activities & planned  
work. System start up most  
likely to begin (pre-startup)  
Tues 11/18.

1230 Tetra Tech off-site

~~Shwager~~

Date \_\_\_\_\_